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RETROSPECTIVE ANALYSIS OF THE INFLUENCE OF LOCAL AND GENERAL SOMATIC AND GYNECOLOGICAL DISEASES ON THE DEVELOPMENT OF MISCARRIAGE (features of gynecological history in women with miscarriage)

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Abstract. Nowadays, in the world, as well as in our country, the incidence of miscarriage is not decreasing, but is widespread. There are many known factors that can cause miscarriage: somatic diseases, gynecological diseases, as well as complicated obstetric history. There is evidence of a genetic predisposition to miscarriage, which includes polymorphism of genes that are responsible for the formation of connective tissue and the formation of inflammatory mediators. The age of a pregnant woman under 18 years and over 35 years is associated with an increase in the incidence of early pregnancy loss.

Key words: early pregnancy loss (early miscarriage), gynecological history, retrospective analysis.

The state of reproductive health is an important component of women's health, which is of great importance for optimizing reproductive function, as well as for social well-being, economic growth of society and the security of the country.

Early miscarriage means loss of pregnancy in the first trimester. Most early miscarriages occur before the 10th week of pregnancy. Miscarriage of a desired pregnancy can be a difficult and sad event, no matter when it occurs. Approximately 10–20% of women who find out they are pregnant experience an early miscarriage. However, 1-4% of cases occur three or more miscarriages in a row, which is early pregnancy loss. Some organizations use less than 10 weeks' gestation to define early miscarriage. ACOG and the European Society of Human Reproduction and Embryology (ESHRE) use a similar term, early pregnancy loss. ACOG defines it as “an empty gestational sac or a gestational sac containing an embryo or fetus without fetal cardiac activity during the first 12 weeks of pregnancy,” while ESHRE considers early fetal loss to occur before 10 weeks of gestation. Although societies do not agree on the correct terminology, early pregnancy loss, defined according to ACOG as a nonviable intrauterine pregnancy <12 6/7 weeks of gestation, will be used here.

All over the world, as well as in our country, the incidence of miscarriage is not decreasing, but is widespread. There are many known factors that can cause miscarriage: somatic diseases, gynecological diseases, as well as complicated obstetric history. There is evidence of a genetic predisposition to miscarriage, which includes polymorphism of genes that are responsible for the formation of connective tissue and the formation of inflammatory mediators. The age of a pregnant woman under 18 years and over 35 years is associated with an increase in the incidence of previous miscarriage. An unfavorable factor is the presence of severe extragenital diseases in a woman. In recent decades, a number of scientific studies have been conducted on the problem of previous miscarriage, which, it would seem, should reduce their frequency, but at the same time, the problem remains relevant.

Purpose of the study: to conduct a retrospective analysis by analyzing the somatic, gynecological and obstetric history of women with early miscarriage.

Materials and methods of research: To achieve this goal, a retrospective analysis of 382 medical records of patients observed in the gynecological departments of the Regional Perinatal Center of the Khorezm region and the city maternity hospital of the city of Urgench was carried out. Diagnosed according to the International Statistical Classification of Diseases and Related Health Problems, Revision X (ICD-10). The study was conducted in women with miscarriage before 13 weeks. The age of the patients ranged from 20 to 40 years, the average age was 23 years, all women were married, the average age at marriage was 21.9±0.28. Retrospectively, the medical history was carefully studied and such data was discovered as: anamnesis of the incidence of somatic, gynecological and obstetric pathologies.

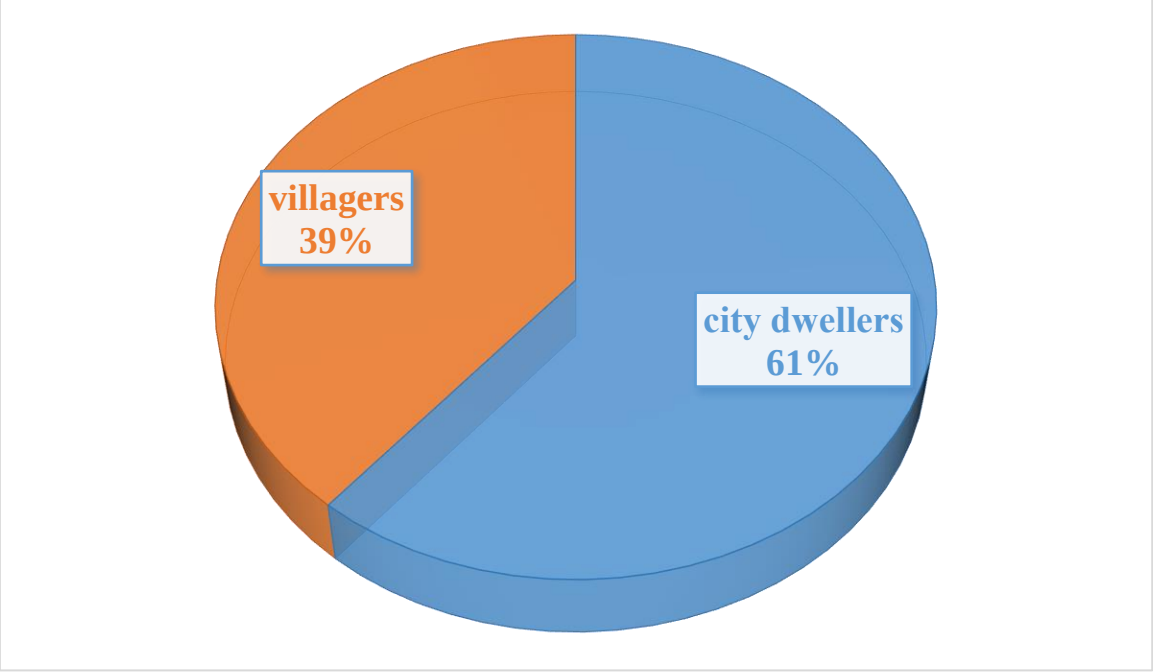
For statistical processing, the data was entered into an Excel table and patients were distributed according to the nature of menstrual function, the number of pregnancies and miscarriages, the presence of endocrine pathology, pathology of the cardiovascular system, systemic diseases, hereditary and acquired thrombophilia, urinary tract disease, gynecological diseases, as well as obstetric history - the number of pregnancies, and their outcomes and complications that arose during pregnancy and in the postpartum period. Statistical processing of the obtained results was carried out using the Statistica for Windows software package. The arithmetic mean and standard error (M±m) were calculated.

Research results:

Based on a full analysis of the patients' medical records, it was established that the majority of patients with miscarriage were urban residents, who accounted for 232 (61%) women and 150 (39%) rural residents (Pic. 1).

Picture 1

Place of residence of women in the study



The social status of the patients, depending on the activities of women, was distributed in this way, the main part were housewives 251 (65.7%), civil servants were 105 (27.5%) women, and

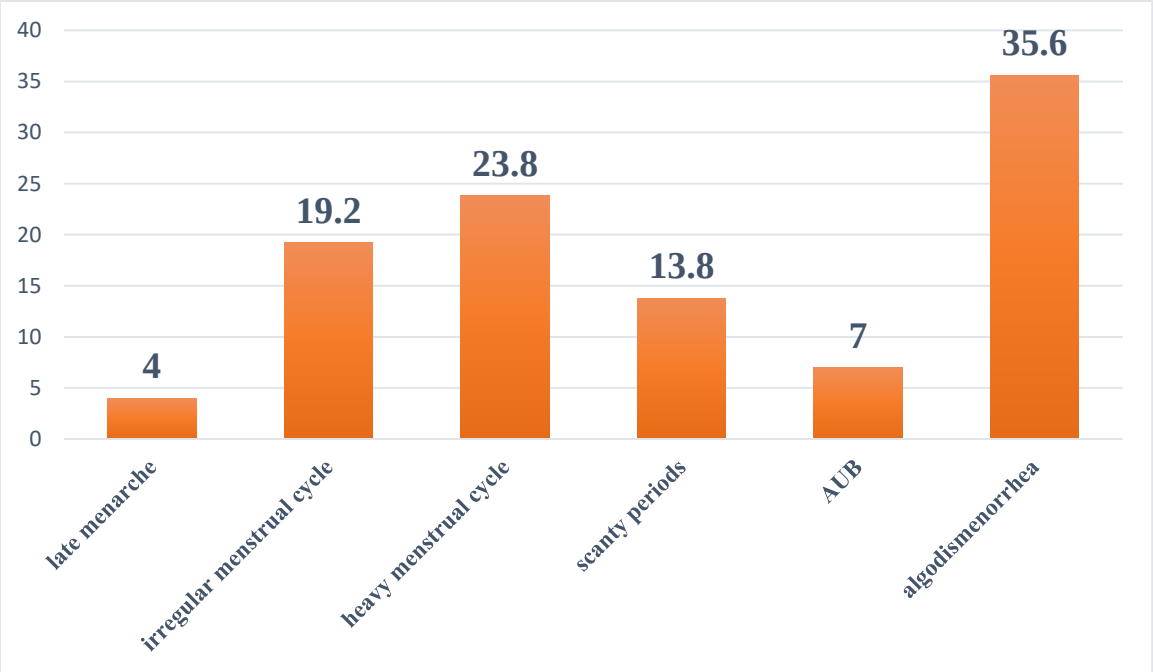
insignificant percentages were students, entrepreneurs and workers who amounted to 1.6 %; 1%; 2.1%.

In our retrospective analysis, when patients went to the hospital, we determined the blood type and Rh blood type, special attention was drawn to the fact that the first blood group was in 157 (41%) women, the second blood group in 82 (21.5%), the third group in 101 (26.4%) and group four in 42 (11%) women. Rh factor was positive in 362 (94.8%) and negative in 20 (5.2%) women, all women with Rh negative blood were administered anti-Rh D immunoglobulin after miscarriage.

The nature of menstrual function was assessed by the average age of menarche, which was 13.9±0.03 in years, the number of days of menstrual bleeding, which on average was 4.26±0.07; the duration of the menstrual cycle (in days) was 29±0.21, and the regularity, pain and amount of menstrual blood loss were also assessed. The results of pathological changes in menstrual function are shown in Picture 2.

Picture 2

Retrospective analysis of menstrual dysfunction in women with early miscarriage (%)

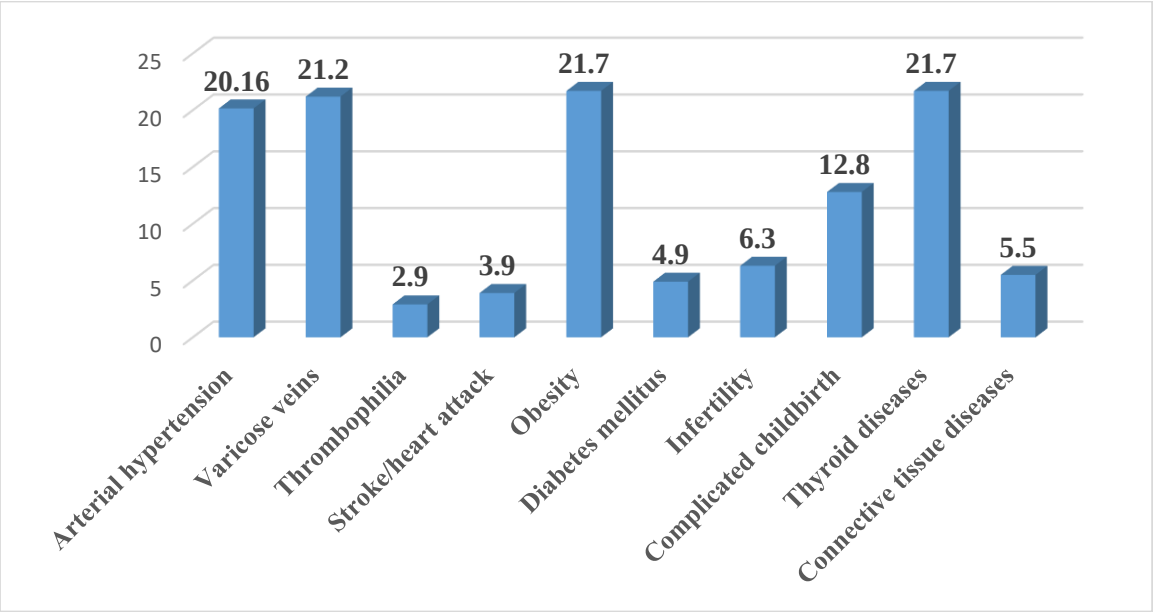


From Picture 2 it is clear that a third of women had a painful menstrual cycle - algodysmenorrhea, perhaps this is due to previous inflammatory diseases of the genitals, interventions on the uterus and postpartum complications. A quarter of the patients experienced heavy menstruation, of which 27 women had a history of abnormal uterine bleeding, which indicates the need to study hormonal disorders, taking into account the assessment of the thyroid gland and inflammatory diseases of the genitals, taking into account the assessment of vascular factors. Based on this, we analyzed the patients' BMI using their medical histories; to accurately diagnose the nature of the fat metabolism disorder, we calculated BMI using the formula (G. Brey index).

BMI=weight (kg)/height (m2).

A BMI value from 20 to 24.9 kg/m2 was regarded as an indicator of normal body weight, from 25 to 29.9 kg/m2 - as overweight, 30-39.9 kg/m2 - as obesity; more than 40 kg/m2 - as severe pronounced (morbid). The average BMI of the examined women was 25.1±0.39. BMI results from 382 medical records showed that 11 (2.9%) women were underweight, 81 (21%) women were overweight, and 78 (20.4%) were obese. An analysis of hereditary diseases of parents and close relatives is shown in Picture 3.

Picture 3. Analysis of hereditary diseases of close relatives (%).



Analysis of hereditary diseases of parents and close relatives showed: arterial hypertension occurred in 20.16%; varicose veins in 21.2%; hereditary and acquired thrombophilia in 2.9%; stroke/heart attacks in 3.9%; obesity in 21.7%; diabetes mellitus in 4.9%; infertility in 6.3%; pathology of the thyroid gland in 21.7%; systemic diseases in 5.5%. The most common pathology was diseases of the cardiovascular system such as arterial hypertension and varicose veins, and endocrine pathology in the form of diffuse goiter.

When studying the somatic pathology of patients with early miscarriage, endocrine pathology was more often observed. Among endocrine diseases, pathology of the thyroid gland prevailed in the form of hypothyroidism, which amounted to 217 (56.8%), hyperthyroidism in 17 (4.5%), autoimmune thyroiditis in 83 (21.7%), metabolic syndromes such as insulin resistance in 89 (23.3%).), obesity 78 (20.4%), prediabetes 16 (4.2%), as well as hyperandrogenism, hyperprolactinemia 12 (3.1%).

An analysis of extragenital diseases was also performed, where the presence of diseases of the cardiac vascular system was assessed, such as: arterial hypertension was observed in 33 (8.6%) women, varicose veins in 104 (27.2%) women; diseases of the urinary tract and kidneys: the most common patients observed were chronic pyelonephritis in 94 (24.6%) and chronic cystitis in 27 (7.06%); respiratory organs (chronic tonsillitis) in 63 (16.5%) and diseases of the gastrointestinal tract. Also, when analyzing extragenital pathology, systemic diseases were identified in 53 (13.87%) cases. Taking this into account, we can say about the timely detection of pathology, taking into account regular visits to a general practitioner, timely detection and treatment of this pathology. And for women with further pregnancy planning, pre-conception preparation should also be carried out, taking into account medical history, hereditary diseases and extragenital pathology.

In addition, patients with miscarriage were characterized by a high level of gynecological morbidity and a burdened obstetric history. 231 (60.5%) women had inflammatory diseases of the uterus and appendages, 18 (4.7%) women had abnormal uterine bleeding, 22 (5.7%) women had uterine fibroids with a size of up to 15 mm according to ultrasound, 62 (16.2%) women had adenomyosis, 12 (25.0%) had missed abortions, 7 (14.5%) had spontaneous abortions, 13 (27.0%) had abortions, 6 (12.5%) – premature birth. Complications and consequences of abortion lead to reproductive health disorders, increased levels of reproductive losses and in 25% of cases to infertility. It should be noted that the level of gynecological pathology was high, especially in those

who had 3 or more miscarriages, with the main percentage accounting for inflammatory diseases of the pelvic organs, which indicates the importance of preventing abortions and infections.

Thus, according to our data, it was found that the level of somatic pathology in patients with miscarriage was 1.5 times higher. Frequency of gynecological morbidity: diseases of the uterus and appendages 2.1 times, uterine fibroids 3.0 times, endometriosis 4.6 times, frozen pregnancies 3.8 times, spontaneous abortions 2.2 times, abortions 2.7 times times, these women are 2.3 times more than women with miscarriage 2 times, which certainly indicates the influence of extragenital pathology and gynecological morbidity on the formation of miscarriage and the importance of preventing abortions and inflammatory diseases starting in adolescence. Prevention of the influence of extragenital pathology and gynecological diseases on fertility consists of early diagnosis of possible chronic diseases and adequate treatment long before planning pregnancy.

Bibliography

1. Kravchenko E.N., Savelyeva I.V., Krivchik G.V., Kuklina L.V., Kazantseva E.S. Anamnesis, course of pregnancy and labor, morphological features of the placenta in women with premature birth and a fetus with extremely low body weight //Mother and Child in Kuzbass. 2023. No. 3(94). pp. 29-36Matrizaeva G.D. Immunohistochemical method for examining the endometrium in cases of recurrent miscarriage in the first trimester / The Journal of humanities and natural sciences/vol.I(2023) p. 93
2. Matrizaeva G.D., Yusupova M.A. Ultrasound prognostic signs of miscarriage and placental insufficiency in the 1st trimester of gestation./ News of dermatovenereology and reproductive health No. 3-4 (79-80) (1) Tashkent 2017 p. 87
3. Matrizayeva GD, Ikhtiyarova GA/ Characteristics of Immunohistochemical Investigations During Early Gestation in Marriage of Pregnancy // American Journal of Medicine and Medical Sciences 2024, 14(6): 1640-1646.
4. Matrizayeva GD, Ikhtiyarova GA/ Immunohistochemical features of the endometrium in miscarriage/ World Bulletin of Publik Health Vol. 17 (2022): WBPH p. 45-62
5. Recurrent Pregnancy Loss / eds. S. Mehta, B. Gupta. – Springer Nature Singapore: Pte. Ltd., 2018. P. 431
6. Recurrent pregnancy loss: current perspectives / HE Hachem [et al.] //International Journal of Women's Health. – 2017. – No. 9. – R. 331 – 345
7. Recurrent Pregnancy Loss and Inherited Thrombophilia / S. Singla,S. Jain // Recurrent Pregnancy Loss / eds. S. Mehta, B. Gupta. – Singapore: Springer, 2018. – R. 113 – 128
8. Recurrent pregnancy loss is associated with leaky gut: a novel pathogenic model of endometrium inflammation? / C. Tersigni [et al.] // Journal of Translational Medicine. – 2018. – No. 16. – R. 102